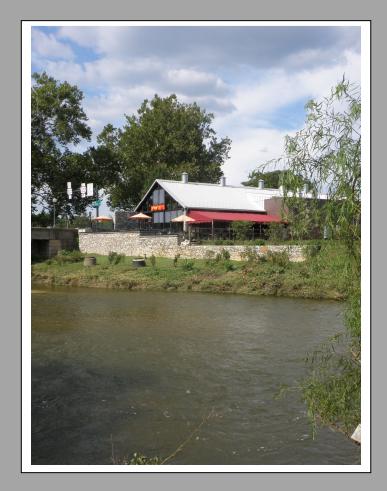
# PLAN<sub>the</sub> KEYSTONE







Downingtown Station Relocation Plan Site Selection Memo 06.12.12





## **Background and Overview**

Downingtown is a borough in Chester County, Pennsylvania located approximately 32 miles west of Philadelphia and 72 miles east of Harrisburg. It is located along the Lincoln Highway (part of U.S. Route 30) which is a prominent east-west road that connects the Atlantic and Pacific coasts of the United States. The Lincoln Highway started as a popular wagon route with stage coach service from Philadelphia to Pittsburgh through Downingtown beginning in the 1800's. Transportation through Downingtown soon changed from stage coach to railroads, with the advent of the Main Line of Public Works.

Today a train station exists at Lancaster Avenue (the Lincoln Highway) and Stuart Avenue. It is currently served by Amtrak and SEPTA. There is no ticket office or station building on the site. However, there is a passenger shelter on each platform.

The current Downingtown Station is not ADA-compliant and is in need of repairs. The Pennsylvania Department of Transportation (PennDOT) and Amtrak are engaging in an effort to upgrade stations on the Keystone Corridor to make them Americans with Disabilities Act (ADA) compliant. PennDOT undertook a public involvement process through stakeholder interviews and a design charrette to obtain community input regarding alternative station locations and improvements. The plan on the following pages summarizes the results of the public participation process.







### **Stakeholder Interview Summary**

On August 30 and 31, 2011, the Plan the Keystone Team met with Downingtown area community leaders, municipal officials, and civic organization representatives to gain a better understanding of the community's issues and concerns regarding redevelopment within the borough and the opportunities presented from potential new investments in the Amtrak train station. Discussions were held with eighteen individuals who revealed the following issues with the current station. Issues fall under four themes:

#### Improve the Station

- Too many "hiding spots" at current location
- Current station is not ADA compliant
- Parking at the current station is nearly at capacity
- Pedestrian tunnel is dirty
- Pedestrian tunnel is scary (stairs)
- Poor lighting
- Parking on north side of tracks fills up quickly
- Commuters park in Johnsontown Park and take spaces away from park users
- No station building just covered shelters
- Station often target of graffiti
- Current station lacks passenger amenities
- Cracks in paving of platforms
- Would like to see a coffee shop or associated retail at station
- Viaduct Ave. one-lane tunnel makes access challenging
- Few bike facilities at station

# Leverage Station Investment to Improve the Downingtown Economy

- Support existing redevelopment efforts in town (Fire Creek development, etc.)
- Foster new business development (currently a lot of vacant store fronts on Lancaster Avenue)
- Build transit-oriented development with station improvements
- Improve streetscapes
- Improve commercial activity in current station location
- Improve currently vacant rail yard Keystone Opportunity Zone (KOZ) site
- Increase property values

#### Connect the Station to Downtown and to the Region

- Connect with major routes 30, 322, 113, PA Turnpike, etc.
- Improve local and regional wayfinding to all destinations
- Provide priority bicycle corridors
- Ensure bus connections to/from the station
- Connect station to trail network (currently many recreational bike riders in Downingtown)
- Provide more parking in downtown

#### Improve Access and Mobility in Downingtown

- Improve pedestrian and vehicular access between Johnsontown and the downtown
- Route 322 truck issues: trucks frequently get stuck in Brandywine Avenue tunnel; Chestnut Street Bridge planned for replacement
- Signal at Lancaster Avenue and 322 often causes back ups
- Sidewalk in Brandywine Avenue tunnel is dangerous for pedestrians
- Ensure station is walkable for residents
- Consider a bike share or bike rental program at station





# **Community Charrette and Station Alternatives**

A community design charrette was held in Downingtown on October 24th through October 27th, 2011, to garner community input regarding the development of goals and a vision for the Downingtown station. Participants discussed what they value about Downingtown and opportunities for the borough.

During the course of the four-day charrette, community members worked with the Plan the Keystone design team to develop concepts for a new ADA-compliant train station at the existing site and at several alternative locations. Residents also discussed opportunities for wayfinding and streetscaping in the borough.

Three alternative areas in the borough were considered for a Downingtown Train Station. These include the:

#### **RIVER STATION WEST**

#### RIVER STATION EAST

#### KEYSTONE OPPORTUNITY ZONE (KOZ) SITE

#### RIVER STATION COMBINATION

Additional analysis was conducted to determine the most feasible and attractive site for the Downingtown Train Station. The results are highlighted as follows.







# **Alternative Sites Analysis**

A feasibility study was conducted at the beginning of the project to determine the suitability of each site. This analysis has been updated to reflect additional information gained through the Community Charrette as well as engineering constraints evaluated after the charrette.

#### Methodology

Four sites were evaluated for suitability for relocation of the Downingtown Train Station, including upgrades to the existing site. The four sites examined were:

River Station West

River Station East

Keystone Opportunity Zone (KOZ) site

**Existing Station** 

The sites were examined using the following criteria:

- Environmental feasibility
- Access and connectivity
- Developable land
- Economic and community impact
- Station constructability
- Local preference

Additionally, an alternative was considered that combined the River Station West and River Station East sites to create a River Station Combined concept.

The table that follows the alternative sites analysis summarizes any anticipated problems that may or may not prohibit project implementation.





# Summary of Alternatives and Suitability Criteria

	Alternative			
Criteria	River Station West	River Station East	KOZ Site	Existing Station
Environmental Feasibility				
Floodplains				
Wetlands				
Endangered Species				
Parks and Recreation Areas				
Other				
Access and Connectivity				
Vehicular				
Pedestrian				
Developable Land				
Developable Land				
	Economic and	d Community Impact		
Economic Impact				
Community Impact				
Station Constructability				
Station Constructability				
Local Preference				
Local Preference				
	Legend			
	No Anticipated Problems			
	Potential Problem, Not Likely to Prohibit Implementation			
	Problems Likely to Prohibit Implementation			





#### **Alternative Site: River Station West**

The Percheron Group owns an 80 acre parcel located on the west side of Brandywine Avenue. The property was formerly the site of a Sonoco plant. Several factory buildings remain on the site.

For several years, the Percheron Group has been working on concepts and plans to construct a mixed-use development centered around a relocated train station. The plans involve reuse of several of the existing buildings onsite and construction of new platforms, a station building, parking, commercial space, residential space, and ancillary retail space.

#### **Environmental Feasibility**

#### • Floodplains

One percent annual chance floodplains and 0.2% annual chance floodplains of the Brandywine Creek encroach onto portions of the property. Development of the parcel may be able to take place without directly encroaching on the floodplains.

#### Wetlands

One freshwater pond is present on the site, but development may be able to take place without a direct impact on it. However, if a stream crossing is necessary to create a pedestrian or vehicular connection, a permit may be required. Coordination with a wetland scientist may be necessary.

#### Endangered Species

A search of the Pennsylvania Natural Diversity Inventory Environmental Review Tool (PNDI) indicated that no threatened or endangered species are known to exist on the site.

#### Parklands and Recreation Areas

If the Boot Road Connector is built through Johnsontown Park to connect River Station West with Johnsontown, this could have a negative effect on parkland in the borough.



Aerial view of River Station West



Brandywine Creek Floodplains





#### **Access and Connectivity**

Primary vehicular access to the River Station West site would take place off of Brandywine Avenue (Route 322). The largest access issue is the existing Brandywine Avenue underpass. Currently, it is wide enough for two way traffic, but could benefit if widened as it is not obvious to many drivers that the tunnel is two lanes. In addition, the tunnel has low clearance, and trucks frequently get stuck in or strike the structure.

Boot Road also provides a means of vehicular access from the east. There is currently no direct route to access the site from the west, so the owner of the site has discussed the Boot Road Connector project with the municipality as a means to provide access.

Pedestrian access to the site from the north or south is via Brandywine Avenue, which has sidewalks along most of the roadway. The sidewalk continues through the underpass on the east side. Stakeholders expressed that they would not be comfortable using it due to the narrow nature of the tunnel. There is potential to create a pedestrian tunnel through the embankment on the River Station West site to the parcel immediately north of the tracks (owned by Dr. Leon Juinta). The parcel consists of a flat parking lot and one building. There may be opportunities to work with this property owner to obtain his land for station parking or to establish an easement to construct a tunnel.

The closest pedestrian connection from the west is a pedestrian bridge being constructed near the Borough Hall just south of Lancaster Avenue. There is currently no pedestrian connection to the site from Johnsontown south of the railroad tracks.

#### **Developable Land**

The 80-acre River Station West parcel is large enough to provide new platforms, a station building, and parking. The site affords the opportunity to create transit oriented development with retail, residential, or commercial space. The developer appears to be willing to work with the borough and other partners and is interested in the train station relocation project.



Parcel north of River Station West



Brandywine Avenue trestle





#### **Economic and Community Impact**

Moving the train station to River Station West would put it physically closer to the center of Downingtown. The proximity would allow for train patrons to walk to and support Lancaster Avenue businesses from Brandywine Avenue. In addition, moving the station to River Station West would provide an opportunity for employees of the industries on Boot Road and nearby in East Caln Township to commute via train.

If the site were designed as a transit-oriented development, it could be designed with new retail, commercial, and/or residential units, thus providing additional property tax income for the borough. The developer of the site has also discussed the possibility of constructing community facilities including a senior center and a library.

The community most impacted by relocating the station to one of the River Station sites would be Johnsontown. The existing station has been a prominent feature in the community since its construction, and measures would have to be taken to redevelop the existing station site so that it does not become blighted.

#### **Station Constructability**

The River Station West site is located on a portion of the Amtrak line that is not on a curve, and construction of 500-foot platforms would be possible, albeit difficult. Based on aerial measurements, there is little more than 500 feet of constructible frontage to the railroad, so additional constructability analysis must occur before any possible site selection. The tracks are elevated in this location significantly above grade (>20ft), so vertical circulation (elevators, stairs, etc.) would be critical to get riders to the platforms. The developer has expressed an interest in reusing some of the existing buildings on the site, which may be integrated into the station design; however, reuse or demolition of the buildings may take some time before construction of the station could begin. If property on the north side of the tracks were to be used for parking or pedestrian access, negotiations would have to be made with the private landowner.

#### **Local Preference**

Moving the train station to one of the two River Station sites is perceived by many stakeholders as necessary. The River Station West site was perceived as the most favorable option because of the opportunity to create transit-oriented development on the site.

#### **Cost Elements**

Given River Station West's significant grade difference and existing infrastructure, the cost would likely be highest of the alternatives. However, the possibility of a public private partnership may help defray the cost of the project, with the possibility of piggybacking off of private infrastructure.



*June 12, 2012* 





#### **Alternative Site: River Station East**

The Percheron Group owns an additional 15 acre parcel on the east side of Brandywine Avenue. Approximately 600,000 square feet of this land has already been cleared. The developer is working to obtain conditional use approval for a mixed-use subdivision on this parcel.

#### **Environmental Feasibility**

- Floodplains
  There are no 1% annual chance floodplains or 0.2% annual chance floodplains on the site.
- Wetlands
   No wetlands are currently mapped in the National Wetlands Inventory (NWI) on the property.
- Endangered Species
   A PNDI search indicated that no threatened or endangered species are known to exist on the site.
- Parklands and Recreation Areas
   Construction at this site would have no impact on parkland or recreation areas.



Aerial view of River Station East

#### **Access and Connectivity**

Access and connectivity to the site are similar to that of River Station West. Primary vehicular access to the River Station West site would take place off of Brandywine Avenue (Route 322). The location of the River Station East site also provides the option of a driveway on Boot Road.

The largest access issue for this site is also the existing Brandywine Avenue underpass. The option of widening it would need to be explored if it were to remain the primary connection to Lancaster Avenue.

Primary pedestrian access would be via the sidewalks on Brandywine Avenue. A pedestrian connection either through, near, or above the existing Brandywine tunnel would need to be addressed. The land directly north of the tracks is utilized by McGuckin & Pyle operations and negotiations with the property owner would be necessary to utilize a portion of this land. A pedestrian connection from the west, such as a bridge across the Brandywine Creek, would be necessary to allow residents of Johnsontown or the western side of Downingtown to access the site. A permit may be required for the pedestrian bridge.





#### **Developable Land**

The 15 acre River Station East parcel is large enough to provide new platforms, a station building, and parking. The site could also be designed to accommodate other uses such as ancillary retail. Approximately 600,000 square feet of the land has already been cleared, which would facilitate the development process.

#### **Economic and Community Impact**

Similar to the economic and community benefits of River Station West, moving the train station to River Station East puts the station physically closer to the center of Downingtown. The proximity would allow for train users to walk to Lancaster Avenue businesses from Brandywine Avenue. In addition, moving the station to River Station East provides an opportunity for employees of the industries on Boot Road and nearby in East Caln Township to commute via train. The developer is currently pursuing mixed-use development on the site, which could provide additional property tax income for the borough.

As mentioned above, the community most impacted by relocating the station to one of the River Station sites would be Johnsontown. The existing station has been a prominent feature in the community since its construction, and measures would have to be taken to redevelop the existing station site so that it does not become blighted.

#### **Station Constructability**

The River Station East site is located on a portion of the Amtrak line that is not on a curve, and construction of 500-foot platforms would be possible. The tracks are elevated in this location, emphasizing the importance of vertical circulation to get riders up to the platforms from the parking area. Private property on the north side of the tracks is at track level, while River Station East property sits approximately one story below the tracks.

#### **Local Preference**

As mentioned above, relocation of the train station to one of the two River Station sites is preferred by many of the stakeholders. River Station West site was perceived as the most favorable option because of the opportunity to create a transit-oriented development on the site; however, the River Station East site is also a favorable option as the majority of the land has already been cleared and would facilitate expedient development. In addition, direct access to the River Station East site could be made from Boot

#### **Cost Elements**

River Station East is free of existing buildings and infrastructure, which would eliminate demolition costs. In addition, the parcel could conceivably be purchased from the existing owner to create a wholly-public project. There is a grade difference between the rail and ground level; however, this would easily facilitate a tunnel for vertical circulation access.







#### Alternative Site: Keystone Opportunity Zone Site

The Borough of Downingtown established a Keystone Opportunity Zone (KOZ) on 70 acres of land in Downingtown to encourage development through tax relief. Approximately 16 acres of this KOZ land is adjacent to the existing Downingtown station on the south side of the tracks. This land is owned by Amtrak and was formerly used as a rail yard but today stands vacant. The KOZ designation is set to expire this year.

#### **Environmental Feasibility**

- Floodplains
  There are no 1% annual chance floodplains or 0.2% annual chance floodplains on the site.
- Wetlands
   No wetlands are currently mapped in the National Wetlands Inventory (NWI) on the property.
- Endangered Species
  A PNDI search indicated that no threatened or endangered species are known to exist on the site.
- Parklands and Recreation Areas
   Construction at this site would have no impact on parkland or recreation areas.
  - Other

    There are concerns of potential environmental contamination on the site, as it was formerly used for storage of Amtrak trains and materials. A Phase I Environmental Site Assessment would be necessary to assess potential contamination.

#### **Access and Connectivity**

Primary vehicular access to the site is via Viaduct Avenue and the single-lane underpass beneath the rail line. The signal and tunnel are able to handle current traffic flows to the existing train station, although more intense development of the site or increased ridership may require that additional access from the north be explored. Vehicular access from the south side of the site is available along Bradford Avenue.

Pedestrians accessing the site could continue to use the existing pedestrian tunnel and a new elevated pedestrian bridge would have to be constructed between the eastbound and westbound platform to provide ADA access. During the stakeholder interviews, stakeholders expressed the importance of the existing pedestrian tunnel which provides the only north/south pedestrian access, particularly for residents of Johnsontown.



Aerial view of the Amtrak property KOZ site



The Amtrak property Keystone Opportunity Zone site





#### **Developable Land**

The KOZ Amtrak property is approximately 16 acres. A charrette which took place several years ago focused on the redevelopment of the KOZ site and determined that seven (7) acres of this land is undevelopable due to steep slopes or narrowness of the parcel. Nevertheless, the KOZ site provides more than enough developable land for a new station and additional parking. The KOZ site is on a portion of the track that is not curved. The large size of the parcel also provides an opportunity for additional transit oriented development on the site. The majority of the rail yard is flat, although steep slopes and rock outcroppings exist on the southern and eastern portions of the site.

#### **Economic and Community Impact**

The relocation of the train station west to the KOZ site would have little economic impact unless the site was additionally developed with retail, commercial, or residential units. The primary parking and access for the station would remain on the south side of the tracks in Johnsontown. Access issues with Viaduct Avenue would persist unless an alternative was developed.

#### **Station Constructability**

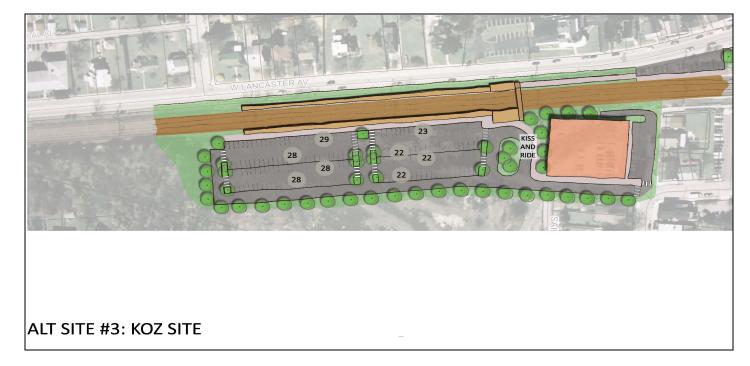
The KOZ property is owned by Amtrak, which may be a benefit to the development process. On the south side of the proposed station location, 500 foot platform construction would be easily accomplished. The north side of the proposed station location has significant challenges due to the proximity of Lancaster Avenue to the railroad tracks. In order to accommodate a platform on the north side, an offset would need to occur that would place the platform slightly west from the current location. It is unlikely that this alignment would provide 500 feet of tangent track for the

platform.

The existing train station parking lots on the south side of the tracks would remain to provide overflow parking, and additional primary parking areas could be constructed on the KOZ land. Due to constraints of existing development and Lancaster Avenue on the north side of the tracks, there would not be adequate land to provide additional parking for the westbound platform.

#### **Local Preference**

The preference expressed by stakeholders during the stakeholder interviews was not to relocate the station to the KOZ site. The stakeholders feel that it would do little to spur additional economic development and commercial activity in the borough, as it is too far away from the center of the downtown. Stakeholders also expressed the concern that if the station is moved to the KOZ site, it is too close to the Thorndale station and thus it will lose ridership from the east.







#### **Alternative Site: River Station Combination**

A fourth alternative is a combination of alternatives 1 and 2. This concept involves development of both River Station East and River Station West parcels. Train station platforms would span both sides of Brandywine Avenue with access to them provided from either side of the street. The combined concept would provide approximately 733 parking spaces which would serve the train station and residential, retail, or commercial development on the sites.







#### **Selected Site**

Through the process of the initial stakeholder interviews, the interactive Community Design Charrette, and the analysis completed after the charrette, a specific site for the Downingtown Train Station has <u>not</u> been selected. Rather, the River Station Combined Alternative will now be further evaluated from an environmental clearance, railroad optimization, and intermodal (vehicle and pedestrian) access perspective. By further analyzing and refining this alternative, the integrity of the environmental clearance process remains intact.

This concept allows the team the most flexibility in site design, while creating the maximum available parking spaces and leaving countless opportunities for private involvement and economic development for the entire Downingtown area. In addition, the proximity of this site to the downtown core will help boost economic activity in the entire borough. Until a final site location is determined, through the environmental clearance process (also known as Linking Planning and NEPA), the community can begin to plan for subdivision, land development, and zoning issues associated with a relocated train station. However, the approval of any final development plan would be premature and ill-advised at this stage of the project.

The flexibility provided by further analyzing the combination of River Station West and River Station East along with the sites north of railroad underpass will allow the team to choose the design elements that are the most cost conscious based on the given project. This flexible design will be able to focus on the goals of the project, while having many options for platform locations, tunnels, and other passenger amenities to be placed where they bring the most utility and at the least cost. Additionally, funding sources can be identified and programmed while environmental clearances and transportation-related issues are resolved.